

Attorney's Docket No.:10559-229001

Listing of Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) Apparatus comprising:

a first component configured to forward data based on a lookup in a routing table and to ~~label the data with information~~ replace a destination address in an Ethernet header of the data to identifying identify a second component;

the second component configured to receive the data; and
an intermediate component bridging the first component and
the second component to forward the data based on the
~~information replaced destination address and in a manner that~~
~~does not require a routing table lookup.~~

2. (Currently Amended) The apparatus of claim 1
comprising additional intermediate components bridging the first
component and the second component to forward the data ~~in a~~
~~manner that does not require a routing table lookup.~~

3. (Original) The apparatus of claim 1 wherein the first
component is configured to receive a packet from a first host
and the second component is configured to deliver the packet to
a second host.

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4. (Original) The apparatus of claim 3 wherein the routing table used to set a path from the first component to the second component is computed by determining a port that leads to the second host.

5. (Original) The apparatus of claim 3 wherein the data comprises a request for an address to which to send the packet; the first component is configured to forward the request; the intermediate component in the path is configured to forward the request to the second component without looking up the routing table; and the second component is configured to receive the request and to send its address back to the first component.

6. (Original) The apparatus of claim 1 wherein the data is part of a packet, and the first component is configured to encapsulate the packet with the address of the second component and to forward the encapsulated packet through the intermediate component to the second component.

7. (Previously Presented) The apparatus of claim 6 wherein the intermediate component acts as a transparent bridge to forward the request and the packet.

8. (Original) The apparatus of claim 6 wherein the second component is configured to route the packet received through the intermediate component to a second host.

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9. (Original) The apparatus of claim 1 wherein the first component, the intermediate component, and the second component are connected through a network medium.

10. (Original) The apparatus of claim 9 wherein the network medium comprises Ethernet.

11. (Original) The apparatus of claim 1 wherein the routing system is configured to support address resolution protocol.

12. (Currently Amended) A method comprising:
performing a lookup in a routing table to determine a path to send data from a sender to a receiver;
~~labeling the data with information replacing a destination address in an Ethernet header of the data to identifying identify a second component connected to the receiver; and~~
~~forwarding the data, based on the information replaced destination address and without performing a lookup in the routing table, through an intermediate component between a first component connected to the sender and the second component.~~

13. (Original) The method of claim 12 further comprising:
forwarding the data without looking up the routing table through additional intermediate components between the first component and the second component.

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14. (Original) The method of claim 12 further comprising:
sending a packet from the sender to the first component;
and

routing the data comprising a request for an address of the
second component from the first component.

15. (Original) The method of claim 14 further comprising:
forwarding the request through the intermediate components;
and

sending a reply from the second component to the
intermediate component; and

forwarding the reply from the intermediate component
without looking up the routing table to the first component.

16. (Original) The method of claim 12 further comprising:
encapsulating the data comprising a packet with address
information of the second component; and

forwarding the encapsulated packet to the second component
through the intermediate component without looking up the
routing table.

17. (Original) The method of claim 16 further comprising:
routing the packet from the second component to the
receiver.

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18. (Currently Amended) An article comprising a machine-readable medium that stores machine-executable instructions for causing a machine to:

perform a look up in a routing table to determine a path to send data from a sender to a receiver;

~~label the data with information replace a destination address in an Ethernet header of the data to identifying identify a second component connected to the receiver; and forward the data, based on the information replaced destination address and without looking up the routing table, through an intermediate component between a first component connected to the sender and the second component.~~

19. (Original) The article of claim 18 further causing the machine to:

forward the data, without looking up the routing table, through additional intermediate components between the first component and the second component.

20. (Original) The article of claim 18 further causing the machine to:

send a packet from the sender to the first component; and route the data comprising a request for an address of the second component from the first component.

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21. (Original) The article of claim 20 further causing the machine to:

forward the request through the intermediate components; and

send a reply from the second component to the intermediate component; and

forward the reply from the intermediate component, without looking up the routing table, to the first component.

22. (Original) The article of claim 18 further causing the machine to:

encapsulate the data comprising a packet with address information of the second component; and

forward the encapsulated packet to the second component through the intermediate component without looking up the routing table.

23. (Original) The article of claim 22 further causing the machine to:

route the packet from the second component to the receiver.

24. (Previously Presented) The apparatus of claim 1 wherein the apparatus comprises a modularized network element that includes the first component, the second component, and the

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intermediate component, the position of the components in the network element changing based on a path of the data.

25. (Previously Presented) The apparatus of claim 24, wherein:

the first component comprises a ingress component of the modularized network element; and

the second component comprises a egress component of the modularized network element.

26. (Previously Presented) The method of claim 12 wherein performing the lookup to determine the path comprises performing the lookup to determine the path in a modularized network element that includes the first component, the second component, and the intermediate component, the position of the components in the network element changing based on the path.

27. (Previously Presented) The method of claim 26, wherein:

the first component comprises a ingress component of the modularized network element; and

the second component comprises a egress component of the modularized network element.

28. (Previously Presented) The article of claim 18 further causing the machine to:

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perform the look up to determine the path in a modularized network element that includes the first component, the second component, and the intermediate component, the position of the components in the network element changing based on the path.

29. (Previously Presented) The article of claim 28, wherein:

the first component comprises a ingress component of the modularized network element; and

the second component comprises a egress component of the modularized network element.